IN THE SPECIFICATION

Please replace paragraphs (0004]. [0005], and [0006] with the following:

[0004] In one aspect, a method for fabricating a scintillator array for a radiation detector of an imaging system is provided. The method includes fabricating a scintillator array including a plurality of scintillators arranged side by side, each of the scintillators separated from adjacent scintillators such that a gap is defined therebetween, each of the scintillators having a geometric shape defined by a plurality of external surfaces, fabricating a pre-formed reflector having a plurality of cavities defined therein, each cavity having a geometric shape substantially similar to each scintillator geometric shape, and coupling the scintillator array and the ~~pre-formed detector~~ pre-formed reflector such that each respective scintillator is positioned at least partially within at least one respective reflector cavity.

[0005] In another aspect, a radiation detector is provided. The radiation detector includes a scintillator array including a plurality of scintillators arranged side by side, each of the scintillators separated from adjacent scintillators such that a gap is defined therebetween, each of the scintillators having a geometric shape defined by a plurality of external surfaces, and a pre-formed reflector including a plurality of cavities defined therein, each cavity having a geometric shape substantially similar to each scintillator geometric shape, the scintillator array coupled to the ~~pre-formed detector~~ pre-formed reflector such that each respective scintillator is positioned at least partially within at least one respective reflector cavity.

[0006] In a further aspect, a computed tomography (CT) imaging system is provided. The CT imaging system includes a radiation source, a radiation detector including a scintillator array including a plurality of scintillators arranged side by side, each of the scintillators separated from adjacent scintillators such that a gap is defined therebetween, each of the scintillators having a geometric shape defined by a plurality of external surfaces, and a pre-formed reflector including a plurality of cavities defined therein, each cavity having a geometric shape substantially similar to each scintillator geometric shape, the scintillator array coupled to the ~~pre-formed detector~~ pre-formed reflector such that each respective scintillator is positioned at least partially within at least one respective reflector cavity, and a computer operationally coupled to the radiation source and the radiation detector.